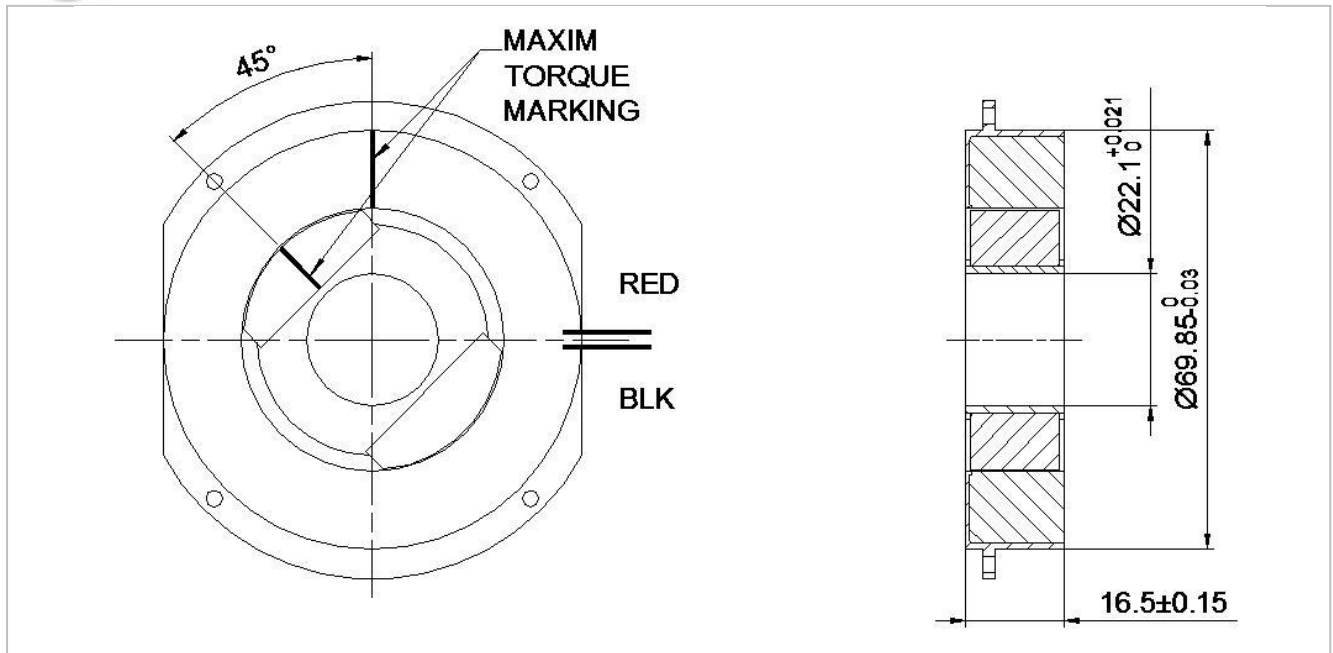




# DC Brushless Torque Motor type : TQR-27/2-0.65

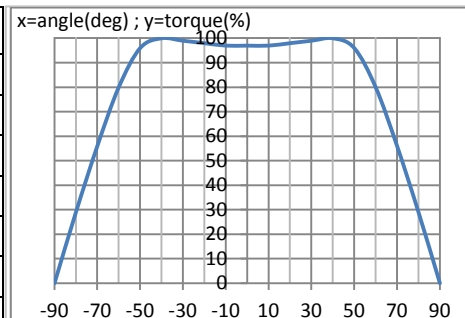


## Performance Data

Parameter	Simbol	Units	Value
Peak Torque, stalled @Vp	Tp	mNm	319
Power Input @Tp	P	W	75.9
Motor Constant	Km	mNm/ $\sqrt{W}$	36.6
Electrical Time Constant	Te	ms	2.56
Rotor Inertia	Jm	Kg m <sup>2</sup>	3.27*10 <sup>-5</sup>
Angular Excursion		deg	±90
Total Break Away Torque	Tf	mNm	3.53
Maximum Allowable Temperature	Temp.	°C (at winding)	155
Number of poles			2
Weight	WT	g	360(max)

## Winding Constants

Parameter	Simbol	Units	Tol.	Value
D.C. Resistance	R	Ω	±12.5%	5.7
Inductance	L	mH	±30%	14.6
Torque Sensitivity	Kt	mNm/A	±10%	87.5
Back EMF Constant	Kb	V/(rad/sec)	±10%	0.0875
Peak Voltage @ Tp	Vp	V	Nominal	20.8
Peak Current @ Tp	Ip	A	Nominal	3.65



Leads AWG 24 teflon coated; 250 mm minimum length.

Direction of rotation viewed from lead side, CW when a positive voltage is applied to the red lead relative to the black.

Insulation resistance @ 250 V D.C. ± 10 V, min 100 MΩ.

Dielectric withstanding voltage - withstand at 250 V rms ± 10V; 50 Hz ; between winding and housing.

All measurements are made at 25 °C ambient temperature.

Mounting dimensions and color of wires can be changed in conformity with customer requirement.

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